Vol. Number 1, Issue Number 4 U.S. EPA, Region 4, Atlanta, GA August 1999

ALPHABET SOUP

FQPA, FIFRA, 2(ee), 24(c), S18, 25(b), TRAC, SAP, PDP, ETC.

An EPA Region 4 pesticide's information update to inform regulators, organizations, and the interested public about the Food Quality Protection Act (FQPA), sustainable agriculture projects, and FIFRA registration actions and policy. Editor: Lora Lee Schroeder, Life Scientist
E-mail: schroeder.lora@epa.gov

GA/SC PEACH TOUR FEATURES IPM RESEARCH

Jim Downing of the Biopesticides and Pollution Prevention Division, EPA HQ, and Lora Lee Schroeder, EPA Region 4 Pesticides Division, participated in the 1999 Peach Tour in Georgia and South Carolina. Both had an opportunity to view peach IPM trials at research stations in Byron, Georgia and Clemson, South Carolina as well as to meet face-to-face with peach farmers to observe their field and processing operations.

Dan Horton, UGA Extension Entomologist and Bob Bellinger, Clemson University's Pesticide Coordinator hosted the tour.

Tour Visits Georgia Peach Farms

In Georgia, the tour included visits to the Big 6 Farm, Dickey Farms, Lane Packing Company, Taylor Orchards and USDA's Southeast Tree, Fruit & Nut Research Laboratory. In South Carolina, the tour included Clemson's Musser Research Farm, Cash Farms and Cooley's Farm and Roadside market.

"The tour was a valuable experience, from my perspective. I very much appreciated the peach farmers' willingness to meet with us and share their concerns. I really learned a lot about the challenges of producing peaches in the Southeast. Peach farmers definitely have to love what they do because it is not an easy job," said Lora Lee Schroeder. "Pest management is only a small portion of the job. We spent a considerable amount of time during the tour talking about labor issues which are critical to peach production."

Peach Tour participants at the Clemson

Musser Research Farm. Pictured left to right in foreground are Lora Lee Schroeder, Jim Downing and Billy Newall, Fruit Researcher

All peaches are hand picked and without a reliable source of labor peach farmers cannot harvest their crop. This is an area of interest to EPA because of worker protection issues.

Methyl Bromide and Methyl Parathion are Important to Peach Growers.

Two pesticides, whose registrations are at risk, identified by growers to EPA as critical to peach production, were methyl parathion and methyl bromide (methyl bromide is scheduled for phase out and cancellation by year 2005).

According to Dan Horton, Extension Entomologist, "In the absence of Penncap-M (methyl parathion), Imidan (phosmet) would immediately become the dominant cover spray insecticide for southeastern peaches. Penncap and Imidan offer broad efficacy, do well against key pests, do not promote secondary pests such as scale, mites or aphis; they do not have resistance problems, and their moderate dermal toxicity is a valued worker safety plus." Dr. Horton went on to say, " Imidan is not as effective on peaches as methyl parathion. At similar, but not really equal rates, Imidan costs 2.2 times what Penncap-M costs. If we face a truncated Penncap-M label, I would anticipate increased use of the cheap,

scale-inducing pyrethroids. Overall insecticide performance would decline and cost would increase."
Extension education efforts are emphasizing the scale problems often seen with pyrethroid use.

In fruit tree nurseries, methyl bromide is the only effective soil fumigant for control of disease organisms in plant nursery beds where valuable peach nursery root stock is propagated.

Guardian Root Stock Resistant to Peach Tree Short Life
Peach researchers from both stations were excited to have an opportunity to showcase ongoing research trials. At the Clemson Station the participants viewed various root stock breeding trials. Peaches suffer from a complex of diseases known as Peach Tree Short life, that causes high tree mortality just as young orchards begin to produce meaningful levels. Guardian, a resistant root stock jointly developed by USDA and Clemson helps lengthen tree life on short life prone sites.
The Clemson Station produces Guardian seed from which resistant root stock is grown.

In previous photo, participants visit Cooley Brother Farms' Roadside stand in SC.

USDA Looking at Alternatives to Methyl Bromide
Andy Nyzecepir of USDA is examining non-chemical grass rotations such as preplanting to wheat as an alternative to methyl bromide to "clean-up" good sites that have succumbed to Peach Tree Short Life.

UGA and USDA scientists led by Harald Scherm are developing models for peach scab and plum curculio. Pest pressures vary through the season. It is hoped these models will allow growers to make well timed, as-needed pesticide applications.

EPA Impressed With Ongoing Research for Organophosphate (OP) Alternatives
Jim Downing of EPA HQ commented on the peach tour by saying, "I came away with a much greater understanding of the pest management problems faced by the southeastern peach growers. But, it's exciting to see some of the research that is going on, especially with regard to alternatives to the OPs. I feel that I am now in a much better position to assist the Georgia Peach Council as their PESP Liaison at EPA."

Region 4 Funds Two Projects Under the Regional Pesticide Environmental Stewardship Program

The region was fortunate to be able to fund two research projects at $40,000 each for 1999/2000. The second project was selected at the national level among all the second picks referred by the 10 regions. Projects in North and South Carolina were funded.

Dr. Anthony Keinath of Clemson University will develop a disease forecasting system for melons which may result in reduced fungicide applications.

Dr. Keinath will feed weather data purchased from KyBit, Inc. into the Melcast interpreter program which calculates the daily environmental favorability index (EFI) for each 24-hour period. Participating growers will be able to obtain EFI values from a toll-free number, electronic mail, or local radio broadcasts. Growers will tabulate and sum EFI and apply fungicides when the threshold values are reached for the sites closest to their fields

This project is of particular value in the southeast because six states in the southern region account for 5l.5 percent of the U.S. watermelon acreage.

The second project is being conducted by John W. Wilcut of North Carolina State University. This project will evaluate practical integrated systems for reducing herbicide use.

This research will have applicability for cotton production on the Coastal Plain from Virginia to Texas and for other wide row crops produced in these areas including corn and peanuts. It is proposed the field study will be used for field days and the research results will be presented at the Beltwide Cotton Conference and the Southern Weed Science Society. The data will be published in the *Cotton Journal*, an Internet publication of the National Cotton Council.

(Source: Proposal abstracts from Keinath and Wilcut, 1999)

****
*

IPM and the Pesticide Environmental Stewardship Program (PESP)

EPA is actively promoting integrated pest management (IPM) practices as one way to reduce the use and risks of higher-risk pesticides. The Agency has formed a strong partnership with the U.S. Department of Agriculture to promote IPM and the use of safer pesticide alternatives.

To educate the user community about IPM and safer pesticides and to encourage their use, EPA has established a voluntary partnership between the pesticide user community and EPA. PESP promotes ways to reduce the use of high-risk pesticides and encourage the use of IPM.

The PESP involves *partners*, who develop educational programs on new techniques for safer pest control, and conduct research leading to the development of safer technologies; and *supporters*, who assist partners by participating in research and providing pesticide educational information to the general public

Eighty percent of the participants in the PESP program are directly involved in producing 16 of the 20 foods most frequently consumed by children, including potatoes, apples and grains.

To find out more about the PESP and its activities, including a complete list of partners and supporters visit the EPA web site at:

<www.epa.gov/oppbppd1/PESP/>
(Source: The letter from Susan Wayland to Dr. Diana Post and Mr. David B. McGrath, dated 2-16-99)
****

The National Environmentally Sound Production Agriculture Laboratory (NESPAL) Promotes IPM Research

NESPAL, located in Tifton, Georgia at the University of Georgia Experiment Station, is a research organization dedicated to the development of environmentally and economically sound agricultural production systems. Researchers from a variety of disciplines participate in the organization. Researchers consist of animal scientists, microbiologists, crop and soil scientists, horticulturists, ecologists, plant pathologists, engineers, entomologists and mass communications professionals.

Some of its current projects include:

1. Development of precision farming techniques and technologies for southeastern agriculture.
2. Riparian zone management for nonpoint pollution control and habitat for beneficial organisms.
3. Movement of pesticides and fertilizers in the agricultural landscape.
4. Development of computerized assessment systems for pest control.
5. Conversion of plant and animal production processing and food byproducts to resources.
6. Developing pest-resistant crops, using genetic engineering and traditional breeding systems.
7. Improved propagation of native plants for landscaping.

For more information on NESPAL visit the web site:
<http://nespal.cpes.peachnet.edu>
(Source: Cotton Grower, June 1999 issue and the NESPAL web site)
****

What is IPM?

According to EPA, IPM is the coordinated use of pest and environmental information with available pest control methods to prevent unacceptable levels of pest damage by the most economical means, and with the least possible hazard to people, property and the environment.

(To learn more about EPA and IPM visit our web site at:

<www.epa.gov/opp00001/food/ipmfs.htm>)

EPA Staff Attends TVA /Cyanamid Seminar

A presentation entitled "Environmental Stewardship-What does it mean to the Utility Industry?" was given at the 6th annual Tennessee Valley Authority/Cyanamid Seminar in Dickson, Tennessee by Lora Lee Schroeder of the EPA Region 4 Office.

A number of best management practices were discussed during the meeting. The pros and cons of mechanical versus chemical means of vegetation management were debated. Information with respect to EPA'S PESP Partners program was shared with the group, in particular how other utility rights-of-way groups such as Edison Electric were cooperating with EPA.

An excellent presentation on establishing wild flowers on utility and highway rights-of-way was given by Brian Bowen of the Tennessee Division of Natural Heritage. Another interesting topic, among many, was Dr. Tom Barnes's talk on "Establishing Wildlife Habitat on Power Line Right-of-Ways."

In addition to the seminar, participants had an opportunity to observe various weed management trials and techniques on a nearby utility right-of-way. The mechanical removal of tree limbs using a helicopter and attached blade was particularly impressive.

****

OTHER EPA REGIONS

****

Region 9 New Hire Adds to Growing Sustainable Ag Expertise Within EPA

Region 9 is pleased to announce the hiring of Lori Ann Thrupp, PhD. Dr. Thrupp joins two other agricultural specialists (Paul Augie Feder and James Liebman) in Region 9's Agriculture Initiative and will be assisting in FQPA implementation and agricultural transition strategies. Region 9 has been promoting ecologically based pest management as an opportunity to address short-term FQPA priorities and as a model for 21st Century farming that is safe, profitable, and resilient.

Dr. Thrupp comes to us from her position as Director of Sustainable Agriculture and Senior Associate, World Resources Institute. She most recently has been working on a project with Napa grape growers and an eco-labeling related project - Greening the Food System- for Richard Kashmanian of EPA's Office of Policy Planning and Evaluation. Dr. Thrupp will begin work with Region 9 on November 8, 1999.

(Source Augie Feder, EPA Region 9)

****

EPA HEADQUARTERS

****

Eighth New Active Ingredient-A Reduced Risk/OP Alternative-Registered by EPA for FY99

On June 24, EPA registered the new miticide active ingredient (A.I.) Technical, Bifennazate, and the end-use product, Floramite. Bifenazate a reduced-risk chemical an OP alternative, is the eighth new A.I. registered this year and is a member of a new class of chemicals known as carbazates. Floramite, a 50 percent wettable powder formulation packaged in water soluble bags, has been registered for use on greenhouse, shade house, nursery, field, landscape, and interiorscape-grown ornamentals. It is a selective miticide having minimal impact on beneficial insects.

(Source: George Tompkins, EPA HQ)

****

Bifenthrin Replaces Methyl Parathion for Snap Beans and Some Sweet Corn

EPA registered new uses for the insecticide bifenthrin: for use on cabbage; the cucurbit vegetable crop group; edible-podded legume vegetable subgroup; eggplant; globe artichoke; head and stem Brassica subgroup (except cabbage); rapeseed (canola); succulent shelled bean and bean subgroup (includes snap beans; and; sweet corn). This Agency action has occurred in time for Del Monte to replace methyl parathion for use on snap beans as well as some sweet corn for this season. These new tolerances were requested by the Interregional Research Project (IR-4) and FMC Corporation.

(Source: Jim Jones, EPA, HQ).

Registration Notes

As of May 1999, The Pesticide Product Information System (PPIS) database showed 902 active ingredients found in 17,372 FIFRA Section 3 pesticide products. There were also 3,124 FIFRA Section 24 (c) products. There were 9,728 tolerances or exemptions on the books.

As of July 30, 1999, EPA had reassessed 3,290 tolerances, surpassing the 33% goal set by FQPA. Of the reassessments completed, 66% (2,178) are in our first priority group. These reassessments represent over 39% of the 5,546 tolerances in this highest priority group. EPA has reassessed 28% of the OP tolerances, 31% of the carbamate tolerances, and 20% of the organochlorine tolerances, as well as 29% of the tolerances for pesticides classified as "probable" human carcinogens.

FQPA required EPA to reassess all 9,721 tolerances and tolerance exemptions that were in effect when the law was passed in August 1996. The law required EPA to complete reassessment of 33% of these tolerances by August 1999, 66% by August 2002 and the remaining tolerances by August 2006.

New ingredients are registered every year, and the number has been edging up compared to the mid-80's, when is was usually less than 20 per year. Last year OPP registered 27 new actives. Other FY activities included registering 140 new uses of existing chemicals, and 258 tolerances or

tolerance exemptions.

Registration Notes Continued

The universe of re-registration "cases" is 612–a "case": may be one compound or it may group several very closely related compounds together. Reregistration cases include only pesticides registered before November 1984. Of the 612 cases, by the end of FY 98, OPP had completed 184, and 231 cases were canceled voluntarily; 197 remain to be done.

OPP staffing is currently 878; the budget is $111 million, of which $23 million goes to contracts and grants. Twenty percent of the OPP budget comes from registration maintenance and tolerance fees.

(Source: OPP Facts provided by Jim Roelofs via e-mail, 5-25-99 and FQPA update figures provided by Susan Acree via e-mail, 8-10-99))

SCIENCE POLICY PAPER ON ROLE OF USE-RELATED INFORMATION PUBLISHED

On July 14, 1999, EPA published a Federal Register notice announcing the availability of a draft document for public comment-The Role of Use-Related Information in Pesticide Risk Assessment and Risk Management. This paper is being released for a 60-day public comment period, as part of a process developed in conjunction with the Tolerance Reassessment Advisory Committee (TRAC) to ensure that EPA's policies related to implementing the Food Quality Protection Act 9FQPA) are transparent and open to public participation. The paper announced in this notice summarizes the types of use-related information used by EPA in risk assessment and risk management, where the data come from, and how the Agency employs these data. The paper is available through the OPP Docket and on the Internet at:
<www.epa.gov/pesticides/trac/science/>
(Source :EPA Pesticide Program Update from OPP dated 7-15-99)

****

*

PESP PARTNERS IN REGION 4

Alabama: Creative Technology

Florida: All Service Pest Management, Inc.; American Mosquito Control Association; Delat Pest Control; Florida Fruit & Vegetable Association; Florida Pest Control Association; Florida turf grass Association; Glades Crop Care, Inc., Massey Services, Inc. Natures' Safeway Pest Control

Georgia: Georgia Peach Council; Professional Lawn Care Association of America; U.S. Public Health Service-Centers for Disease Control and Prevention; University of Georgia-College of Agriculture & Environmental Sciences

North Carolina: Carolina Power & Light; Duke Power Company

Tennessee: Environ "Pest Elimination" Inc.; Tennessee Valley Authority

South Carolina: Agricultural Conservation Innovation Center

(Source: PESP Web Site: **<http://www.pesp.org/oeso/members/state.htm>**

****

OTHER ORGANIZATIONS

****

*

The May 1, 1999, edition of the journal *Environmental Science and Technology* contains an article entitled, "**Keep Off the Grass and Take Off Your Shoes! Common Sense Can stop Pesticides From Being Tracked in the House**."

The article reports on the results of a study conducted by Battelle Memorial Institute with financial support from EPA's Office of Research & Development. The study, which was designed to assess the potential exposures of small children to pesticides used in an around the home, found that rooms with carpeted floors generally have the highest levels of tracked-in herbicides such as 2,4-D. The article notes that weed killers and other pesticides applied to lawns can be tracked into homes by people and pets for a week or more after treatment, causing unnecessary exposure, particularly to children. It recommends "removing shoes before entering the house and restricting youngsters and pets from lawns following application."

YOUR COMMENTS

"This is a long overdue thanks for the *Alphabet Soup*. Your newsletter compiles information that would be very time consuming and difficult to obtain from other sources, even web sites. Thanks. (Archie Collins, Pesticide Inspector, Tennessee Department of Agriculture)

****

COMMENTS BY THE AUTHOR

If readers, have comments or suggestions for this newsletter they would be gratefully received.

To submit comments or information for *Alphabet Soup* please contact:

Lora Lee Schroeder
U.S. EPA / REGION 4
ATLANTA FEDERAL CENTER

AIR/PESTICIDES SECTION
61 FORSYTH STREET
ATLANTA, GA 30303-3104

schroeder.lora@epa.gov